

**Additional notes on South African introduced molluscs,
including a species new to the list**

by

A. C. van Bruggen

(Dept. of Systematic Zoology, c/o Rijksmuseum van Natuurlijke Historie,
Leiden, Netherlands)

SYNOPSIS

Cochlicopa lubricella (Porro), a European land mollusc new to the South African list, found in Grahams-town; additional data on introduced molluscs and species from greenhouses in South Africa.

Several additional records of introduced non-marine molluscs in Southern Africa have come to hand since the present author's paper on this subject was published (Van Bruggen, 1964). The discovery of *Physa acuta* (Drap.) was announced in 1966 (Van Bruggen, 1966) and now another species new to South Africa has been obtained.

On 21st February, 1965, Mr. R. N. Kilburn collected a number of small gastropods, some of which were alive, in sand under a hedge in the grounds of Rhodes University, Grahamstown, C.P.; these proved to belong to the genus *Cochlicopa* Risso, 1826 and were subsequently identified by Dr. C. O. van Regteren Altena of the Leiden Museum as *C. lubricella* (Porro, 1838) (fig. 1). The species is locally common and material has been deposited in the Natal Museum (NM), Pietermaritzburg (Moll. No. 4216) and in the Rijksmuseum van Natuurlijke Historie (RMNH), Leiden, Netherlands. *C. lubricella* is new to the South African list and also the family Cochlicopidae, which to my knowledge has so far not been reported from the Ethiopian Region. *C. lubricella* is certainly not one of the rather limited assemblage of well-known immigrant snails and it appears that this is probably the first time it has been found outside its normal range.¹ Its presence in Grahamstown may possibly be explained by the proximity of the Botanical Gardens which adjoins the University grounds. The species is widely distributed in Europe (*vide* Zilch & Jaeckel, 1962); its systematic status and nomenclature are somewhat confused, but *C. lubricella* appears to be the correct name for a separate species closely allied to *C. lubrica* (Müller, 1774). Quick (1954), who has been mainly followed here, considers the name *Achatina exigua* Menke, 1830, a *nomen nudum* and *A. minima* Siemaschko, 1847, a synonym.

Cochlicopa lubricella has a small, subcylindric shell with 5-6 whorls. The measurements vary between $3.5-5.0 \times 1.5-2.1$ mm (Sweden, data ex Nilsson, 1956), $4.0-5.2 \times$

¹A closely allied European species, *Cochlicopa lubrica* (Müll.), has been reported from New Zealand and Venezuela (cf. Zilch & Jaeckel, 1962).

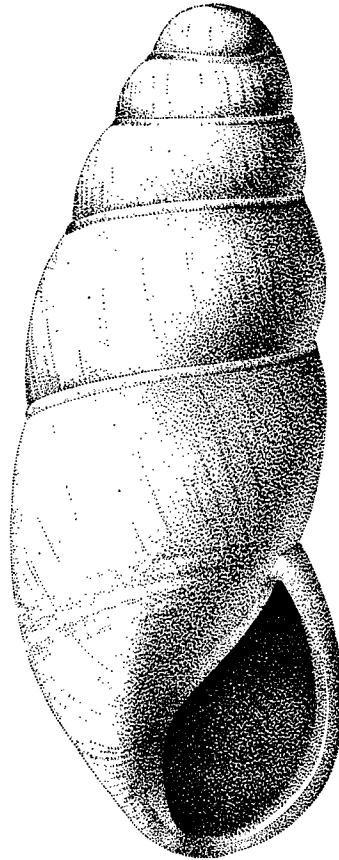


Fig. 1. *Cochlicopa lubricella* (Porro), actual length 5.2 mm., specimen in Leiden Museum. H. Heijn del.

average of 2.2 mm (Denmark, data ex Quick, *op. cit.*) and $4.5-6.8 \times 2.1-2.6$ mm (United Kingdom, data ex Quick, *op. cit.*). Adult Grahamstown specimens have the following measurements:

- 5.0 \times 2.0 mm, NM,
- 5.0 \times 2.1 mm, „
- 5.1 \times 1.9 mm, „
- 5.2 \times 2.0 mm, RMNH, see fig. 1,
- 5.3 \times 1.9 mm, NM,
- 5.3 \times 2.1 mm, „
- 5.4 \times 1.9 mm, „
- 5.6 \times 2.1 mm, „

which may be summarized as follows: $5.0-5.6 \times 1.9-2.1$ mm. The Grahamstown sample is thus derived from a population with fairly long and very slender shells; circumstantial

evidence, such as the history of the Botanical Gardens in Grahamstown, may lead to the assumption that the original specimens came from the United Kingdom. In Europe the species is somewhat xerophilous and is usually found among rocks and stones; undoubtedly it is ecologically more suited to life in the Eastern Cape Province than the other two species of *Cochlicopa*, which are more partial to damp places.

Another additional record is for *Bradybaena similaris* (Férussac, 1821). A sample of the latter species was submitted for identification to the South African Museum, Cape Town, by the Department of Agriculture of Mozambique in 1952. These molluscs were collected in Lourenço Marques (S. Afr. Mus. No. A8555, duplicate in NM, Moll. No. 4226) and discovered in the Cape Town museum by the present author in 1965. *B. similaris* is only the second imported mollusc species for both Mozambique (Portuguese East Africa) and the city of Lourenço Marques.

Introduced snails are by no means common in Lourenço Marques as was proven by investigations of the author and his wife in May, 1965, when not a single specimen could be obtained in the Botanical Gardens, parks and suburbs (see also below).

No records of alien molluscs were available for Swaziland (cf. Van Bruggen, 1964); however, some time ago two species could be recorded. Dr. R. F. Lawrence collected three slugs at Mbabane in November, 1964, which material was identified by Dr. C. O. van Regteren Altena as *Deroceras laeve* (Müller, 1774). The specimens belong to the collections of the Natal Museum. Van Eeden & Brown (1966) have recently also recorded for Swaziland the American freshwater snail *Lymnaea columella* Say, 1817. Incidentally, the phenomenal dispersal of this apparently most successful lymnaeid is unique among Southern African alien molluscs; in the course of many years some species have been moderately successful in occupying fairly great stretches of country [*Deroceras laeve* (Müll.), *Theba pisana* (Müll.), *Helix aspersa* Müll.], but none has made such explosive progress in such a short time as *Lymnaea columella* Say has done (cf. map in Van Eeden & Brown, *op. cit.*). The situation in Swaziland should be closely watched, particularly now that a railway connection with Lourenço Marques has been established.

The occurrence of *Lymnaea columella* Say in Rhodesia (Mandahl-Barth, 1962, p. 145 "... also found in Southern Rhodesia.") was inadvertently overlooked in my earlier paper (Van Bruggen, 1964); this is only the third alien species to be reported from Rhodesia.

Greenhouses in Southern Africa generally do not shelter such a wealth of foreign species as their European counterparts do. So far the following data have been collected by the author:

Pretoria, National Herbarium, greenhouse basin, 3.VII.1958/1.III.1959: *Lymnaea natalensis* Krauss, 1848 (NM, duplicates in RMNH);

Pretoria, National Zoological Gardens, greenhouse basin, 3.VII.1958: *Lymnaea natalensis* Krauss, 1848 (NM, duplicates in RMNH);

Cape Town, municipal Botanical Gardens, greenhouse, 18.IX.1965: *Oxychilus draparnaudi* (Beck, 1837) (NM, Moll. No. 4222), *Deroceras laeve* (Müller, 1774) (NM, det. Dr. C. O. van Regteren Altena);

Port Elizabeth, St. George's Park, greenhouse basin, 16.XII.1960: *Lymnaea columella* Say, 1817 (NM, Moll. No. 4058).

Investigations in the outstanding new greenhouses of the Jardim Vasco da Gama, Lourenço Marques, in May, 1965, were completely negative as far as molluscs are concerned.

Acknowledgements are due to Dr. C. O. van Regteren Altena, who is currently revising the South African Arionidae and Limacidae, for supplying various data for this paper.

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Date received: 19 August, 1966.